

A measuring device for the thermal

S/803/62/000/002/002/006

schematic circuit diagram is shown, and a correlation between theoretical and experimentally obtained data is adduced. A block diagram of the power-control system of the reactor is traced. A curve of a transitional process for a total control time of 120 sec is shown, and it is shown that the maximal overcontrol amounts to 208%. By contrast, an analogous transient process in which an ionization chamber is used as a power transducer has a total control time of 19 sec and a maximal overcontrol of 20%. It is apparent that the proposed use of a thermal-transducer computer system is significantly less favorable than a control system with an ionization chamber. However, by using corrective and intensifying (booster) elements, the quality of a transient process can be substantially improved, and, for certain reactor systems which operate on an essentially constant power level, the proposed system is fully practicable. There are 9 figures and 3 references (2 Russian-language Soviet and 1 English-language in Russian translation).

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CA

SUSANINA, O. G.

7

Photocolorimetric determination of iron in used oils.
O. G. Susanina, Zurodskaya Lab. 16, 105-61(1930).—
The ashed sample, taken up in concd. HCl and treated
with Na salicylate and NH₄OH, is analyzed with the Pul-
frich photocolorimeter by using a green filter.
G. M. Kholopoff

SUSANINA, O.G.			
Subject	: USSR/Chemistry	AID P - 1101	
Card 1/1	Pub. 78 - 12/21		
Authors	: Chernozhukov, N. I. and Susanina, O. G.		
Title	: Physical properties and structure of naphthenic hydrocarbons of oil fractions		
Periodical	: Neft. khoz., v. 32, #10, 57-61, 0 1954		
Abstract	: The method of crystallization of naphthenes from white medicinal and perfume oils is described on the basis of which the structure and properties of pure naphthenic hydrocarbons of oil fractions were determined. Five and six-ring naphthenes were separated with this method. Two tables.		
Institution	: None Moscow Petroleum Inst. in. I. M. Gabkin		
Submitted	: No date		

SUSANINA, O.G.

AUTHORS: Susanina, O.G. and Chernozhukov, N.I. 65-10-4/13
TITLE: An Investigation of the Solubility of the Individual Groups of Hydrocarbons of Oil Fractions in Acetone (Issledovaniye rastvorimosti v atsetone otsek ot del'nykh grupp uglevodorodov maslyanykh fraktsiy)
PERIODICAL: Khimiya i Tekhnologiya Topliva i Masel, 1957, No.10, pp. 14 - 21 (USSR)
ABSTRACT: The problem of how the individual groups of hydrocarbons in oils can be separated from a polar solvent within a wide range of temperatures was investigated. Two types of raw material were taken for the experiments: a distillate auto oil 10 from a mixture of 10 crude oils from Baku and a distillate of the Surakhansk paraffinic crude. Physico-chemical properties and group composition of the materials are given in Tables 1 and 2, respectively. Acetone was chosen as a solvent and the experiments were carried out in the temperature range - 70 °C to the critical temperature of acetone. The experimental results are given in Tables 3 and 4 and Figs. 1-7. It was established that on decreasing the temperature of acetone solutions of oils, paraffins, naphthenes and aromatic hydrocarbons with a large number of carbon atoms in the side chains crystallise with the formation of saturated solutions in acetone. In respect of the

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65-10-4/13

An Investigation of the Solubility of the Individual Groups of Hydrocarbons of Oil Fractions in Acetone

above groups of hydrocarbons acetone, similarly to non-polar solvents, shows dispersing properties. The main part of aromatic hydrocarbons and resins is strongly retained in acetone solutions even at very low temperatures. It is obvious that these hydrocarbons and resins are combined with the solvent due to the influence of its polar properties. In the temperature range near to the critical temperature of acetone, the precipitation of high molecular hydrocarbons and resins takes place, similarly to their precipitations from propane and other non-polar solvents. The polar properties of acetone appear in a considerable narrowing, in comparison with propane, of the temperature range in which the separation of the second phase (asphalts) takes place. The method of fractional crystallisation of hydrocarbons from solutions of oils in acetone together with chromatographic separation of fractions isolated on silicagel and activated carbon can be used for the analysis of the structure of hydrocarbons in oils. De-paraffinisation of oils at low temperatures in acetone-toluole solutions leads to the separation from the solution of a considerable amount of valuable low solidifying naphthenic and aromatic hydrocarbons. A mixture of 25% of

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65-10-4/13

An Investigation of the Solubility of the Individual Groups of Hydrocarbons of Oil Fractions in Acetone

acetone and 75% of toluole separates the above hydrocarbons to the same extent as pure methyl ethylketone. At very low temperatures of de-paraffinisation, a mixture of 25% of methylethylketone and 75% of toluole does not separate valuable hydrocarbons when a high excess (in respect of oil) of solvent is present. There are 7 figures, 4 tables and 2 Russian references.

ASSOCIATION: Moscow Petroleum Institute imeni Academician I.M.Gubkin
(Moskovskiy neftyanoy institut im. Akad. I.M. Gubkina)

AVAILABLE: Library of Congress

Card 3/3

SUSANINA, O.G.

SUSANINA, O. G., Cand Tech Sci -- (diss)
solubilities of the oil fractions of petroleum and ketones.
hydrocarbons." Mos, 1958. 11 pp. (Min Higher Ed USSR, Mos
Order of Labor Red Banner Patrol Inst im I.M. Gubkin), 100
copies. kkm (KL, 9-58,119)

Studies
"Investigation of the
in e"

- 95 -

S/081/61/000/002/016/023
A005/A105

Translation from: Referativnyy zhurnal, Khimiya, 1961, No. 2, p. 445, # 2M201

AUTHORS: Chernozhukov, N. I., Lukashevich, P. I., Bikkulov, A. Z., Susanina,
O. G., Kazakova, L. P., Sadchikova, M. F., Shchegrova, K. A., Markova,
L. M., Kiriya, V. V., Kuz'mina, N. A., Glazov, G.

TITLE: The Solubility of Oil Hydrocarbons in Organic Solvents and Ways of
the Oil Production Improvement

PERIODICAL: Tr. Mosk. in-t neftekhim. i gaz. prom-sti, 1959, No. 24, pp. 311-340

TEXT: The authors recommend ways of improvement of the lubricant production. Hydrocarbons of higher molecular weight and higher freezing point are in the first place separated at the fractional crystallization of oil hydrocarbons from their solution in acetone. The solubility of the naphthalene and paraffin fractions of oils as well as the solubility of a part of the aromatic hydrocarbons and resins result from the effect of the dispersion forces, and the solubility of the remaining part of aromatic hydrocarbons and resins is connected with the action of polar forces. The increase of the dissolving power of the solvent is a consequence of the increase of both its dipole moment and the non-polar portion

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S/081/6:/000/002/016/023
A005/A105

The Solubility of Oil Hydrocarbons in Organic Solvents and Ways o^r the Oil Production Improvement

of its molecule. In both cases, the increase of the dissolving power of the solvent is accompanied with the decrease of its selectivity. There are considered: the mechanism of the de-asphaltizing of a petroleum concentrate by propane; the effects of temperature and quantity of furfurole on the course of refining of the oil distillate of the Tuymazy petroleum; the properties of phenol and furfurole. An increase in the quantity of furfurole in the refining makes up the insufficiency in its dispersion properties; hereat, the quantity of aromatic hydrocarbons being to be eliminated sharply increases, as a result of which the viscosity coefficient of the refined product increases more than at increased refining temperature. By the use of phenol, the output of refined products is lower than for the refining by furfurole in consequence of the higher dissolving power of the former. The high dissolving power of phenol leads to super-refining of oils in consequence of which their resistance to oxidation decreases. By the addition of water to phenol, its dissolving power decreases, and the selection properties and the output of refined products increase, whereat its viscosity coefficient inconsiderably decreases. The treatment of a transformer oil distil-

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		S/081/61/000/011/038/040 B110/B201	
AUTHORS:	Chernozhukov, N. I., Susanina, O. G., Kazakova, L. P., Sadchikova, M. F.		
TITLE:	Methods of separating and studying naphthenic and aromatic hydrocarbons of oil fractions and cereins		
PERIODICAL:	Referativnyy zhurnal. Khimiya, no. 11, 1961, 493, abstract 11M267 (11M267) (Sb. tr. Mezhvuz. soveshchaniya po khimii nefti, 1956. M., Mosk. un-t, 1960, 114-127)		
TEXT:	Naphthenic hydrocarbons were separated from the distillate of Baku "avtol-10" (avtol-10) by chromatography on silica gel. They were then freed from impurities by adsorption on activated carbon and dissolved in an eightfold volume of methyl-ethyl ketone. As the solution was cooled to various temperatures, five fractions of liquid hydrocarbons were separated, which, on further cooling of the solution, displayed an almost uniform decrease of n_{D}^{20} (1.4947 - 1.4914); d_4^{20} (0.9000 - 0.8928), and of the molecular weight (458-298), and which mainly consisted of		
	Card 1/3		

Methods of separating and ...

S/081/61/000/011/038/040
B110/B201

respectively; 64.4 and 74.5% naphthenes, and 3.3 and 0.6% aromatics. From the fraction 400-450°C ($n_D^{20} = 1.4949$; $d_4^{20} = 0.8832$, viscosity = 87 cst at 100°C) of Devonian petroleum from Tuymazy, 10 fractions of aromatic hydrocarbons were separated by adsorption on silica gel. From them, the sulfur compounds were removed by the Ginzberg method, through oxidation by H_2O_2 in the presence of glacial acetic acid. In various desulfurized fractions, the presence of the following hydrocarbons was established by spectrum analysis: monocyclic and bicyclic aromatics, naphthalenes, tricyclic condensed naphthalenes and phenanthrenes. [Abstracter's note: Complete translation.]

Card 3/3

L 8766-65

EWT(a)/EPF(s)/EWP(j)

Fe-L/Pz-L

RM

S7

S/2982/63/000/044/0048/0047

ACCESSION NR: AT4008699

AUTHOR: Guseva, V.I., Lukashevich, I.P., Susanina, O.G., Markova, L.M.,
Troitskaya, N.I.

TITLE: Petroleum refining products as softeners-filters for butadiene-styrene rubbers

SOURCE: Moscow. Institut neftekhimicheskoy i gazovoy promyshlennosti. Trudy, no.
44, 1963. Neftekhimiya, pererabotka nefti i gaza, 48-57

TOPIC TAGS: petroleum product, plasticizer, filler, butadiene styrene, rubber,
butadiene styrene rubber filler, butadiene styrene rubber plasticizer, oil refining, oil
refining product, low temperature resistant rubber, oil filled rubber, rubber
softener, softener, rubber plasticizer

ABSTRACT: The use of a wide variety of petroleum products as softeners and fillers
for rubbers was investigated. The physical-chemical properties of the petroleum
fractions and the compounds separated from them were analyzed. It was found that
aromatic hydrocarbons combine with rubber better than the paraffin-naphthenic type.
A change from light to heavy aromatic hydrocarbons causes an increase in the internal
friction coefficient and the tensile and rupture strength of the rubber, along with a

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L 8766-65
ACCESSION NR: AT4008699

decrease in elasticity and frost resistance. Light aromatic hydrocarbons with a ring number of 1.7-2.0 and an aniline point no higher than 70°C, as well as medium hydrocarbons with a ring number of 2.5-3.0 and an aniline point no higher than 60°C, combine well with and guarantee high vulcanized rubbers. Paraffin-naphthenic hydrocarbons with a ring number of 2.5-3.5 and an aniline point no higher than 125°C also give suitable results. Rubbers containing avtol 18 were compared with those containing other petroleum products. It was noted that rubbers with refined and deparaffined oils having a lower aromatic hydrocarbon content possess a lower brittleness temperature, higher elasticity and significantly lower stability than rubbers with avto 18. However, they are deficient in the sense that they exude oil. The physical-mechanical properties of rubbers containing deasphalted tar oil are comparable to those containing avtol 18. Adding raffinate P to rubbers causes a high stability with large doses and high elasticity at increased temperatures. The use of softeners and fillers is necessary in order to attain sufficiently high physical-mechanical properties and a high elasticity for rubbers. An example of a softener-filler is a secondary raffinate obtained by selective refining and removal of paraffin-naphthenate and naphthene-aromatic hydrocarbons. Several methods are proposed for obtaining products of this type; separation by cooling an

Card 2/3

L 8766-65						
ACCESSION NR: AT4008699						
extracted phenol solution gives the best results. Orig. art. has: 5 tables.						
ASSOCIATION: Institut neftekhimicheskoy i gazovoy promyshlennosti, Moscow. (Institut of the Petroleum Chemistry and Gas Industry)						
SUBMITTED: 00		ENCL: 00		SUB CODE: MT, OC		
NO REF SOV: 000		OTHER: 003				
Card 3/3						

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001654010002-2"

KLIMKOVA-DEUTSCHOVA, Eliska; SALCMANOVA, Zdenka; SCHWARTZLOVA, Kveta;
SYNEK, Vladimir; SUSAKOVA, Vera.

Importance of neurological findings in the diagnosis of
diseases caused by vibration. Prac. lek. 17 no.1-5 Ja '65

1. Neurologicka klinika lekarske fakulty Karlovy University
v Plzne (prednostka: doc. dr. E. Klimkova-Deutschova).

SUSANOV, E. Ya.

"The composition of criterial equations of mass transfer and dissipative effects in bubbling processes."

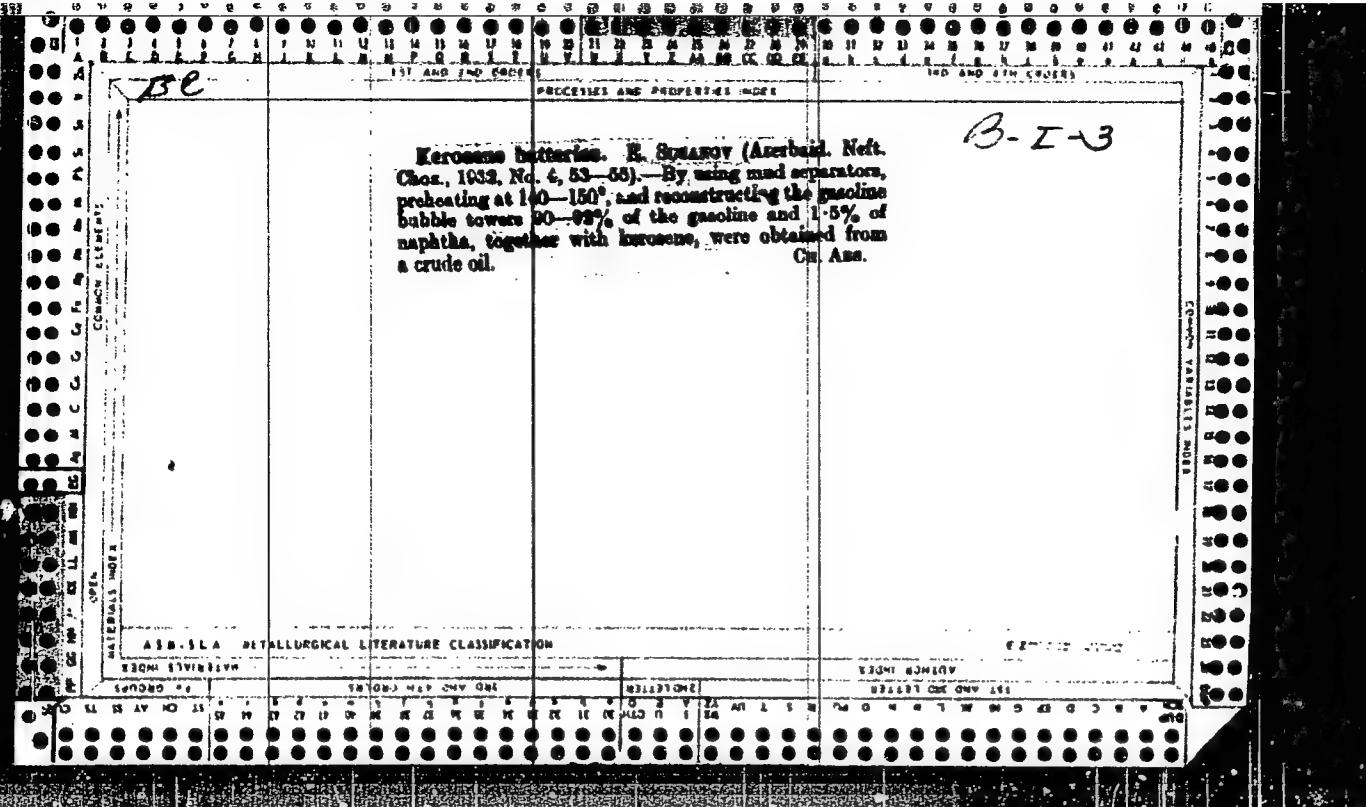
report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12 May 1964.

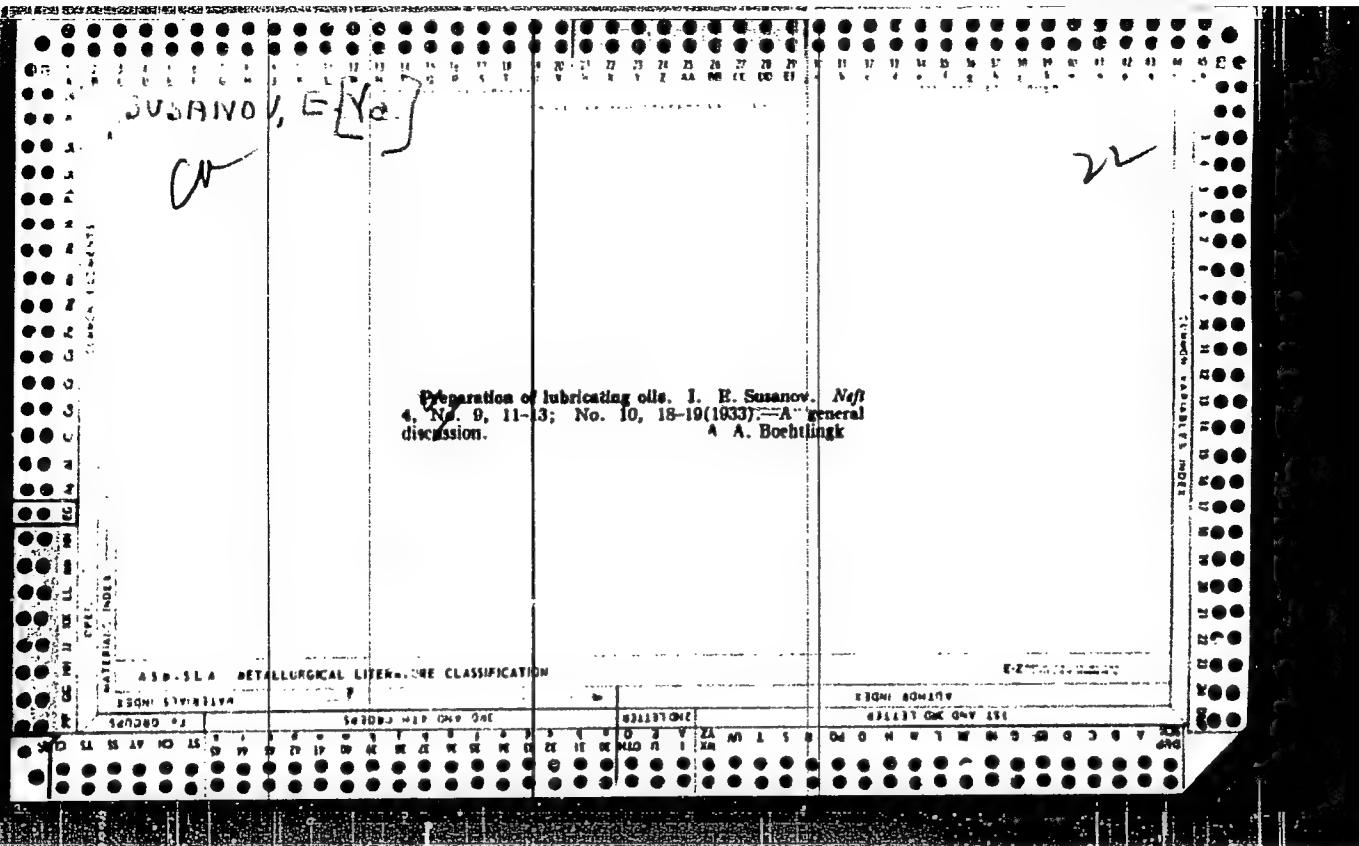
All-Union Sci Res Inst for Petroleum, Krasnodarskiy Branch

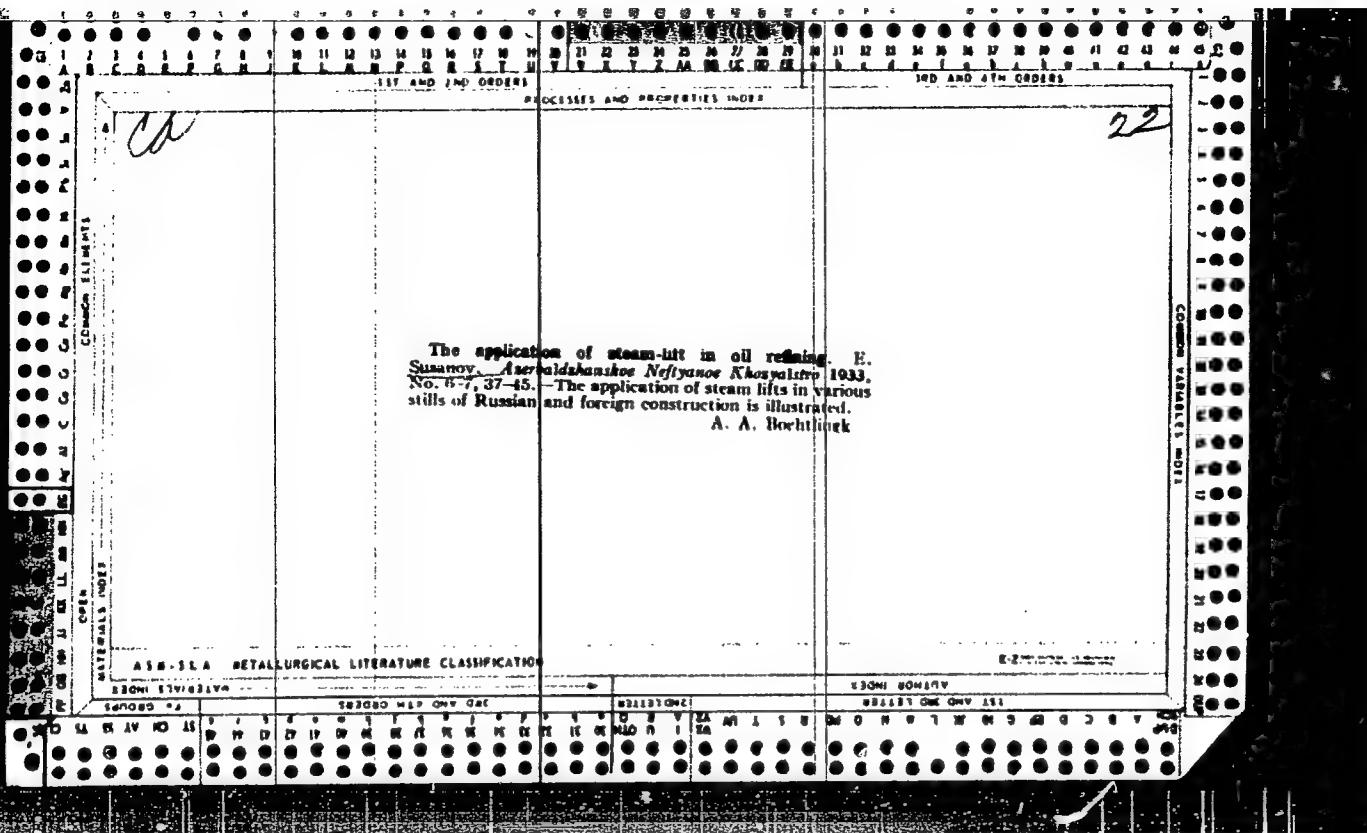
SUSANOV, M.S.

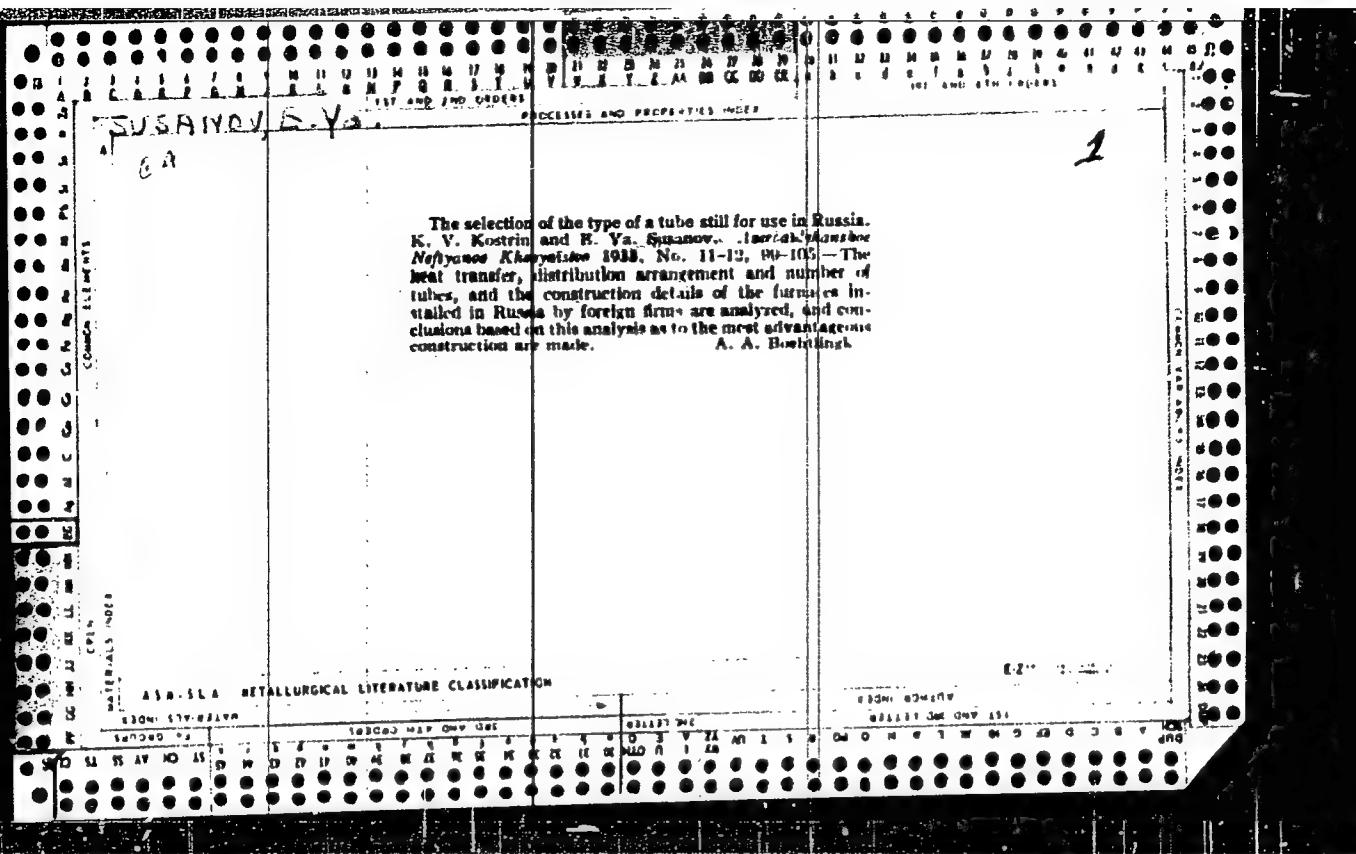
Changing production procedures for pipes with a diameter of 10 X 1 mm.
Sbor.rats.predl.vnedr.v proizv. no.5:31 '60. (MIRA 14:8)

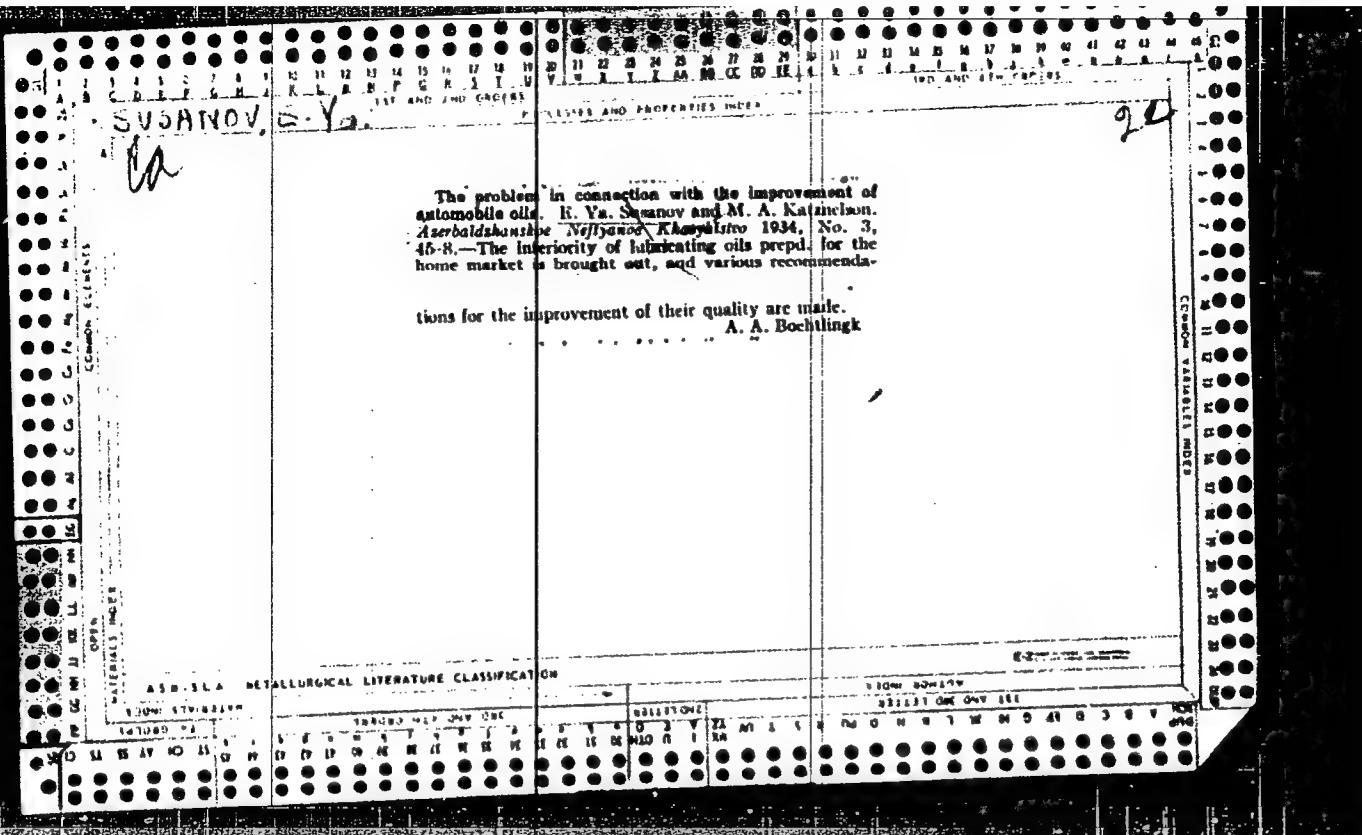
1. Pervoural'skiy Novotrubnyy zavod.
(Pipe mills)

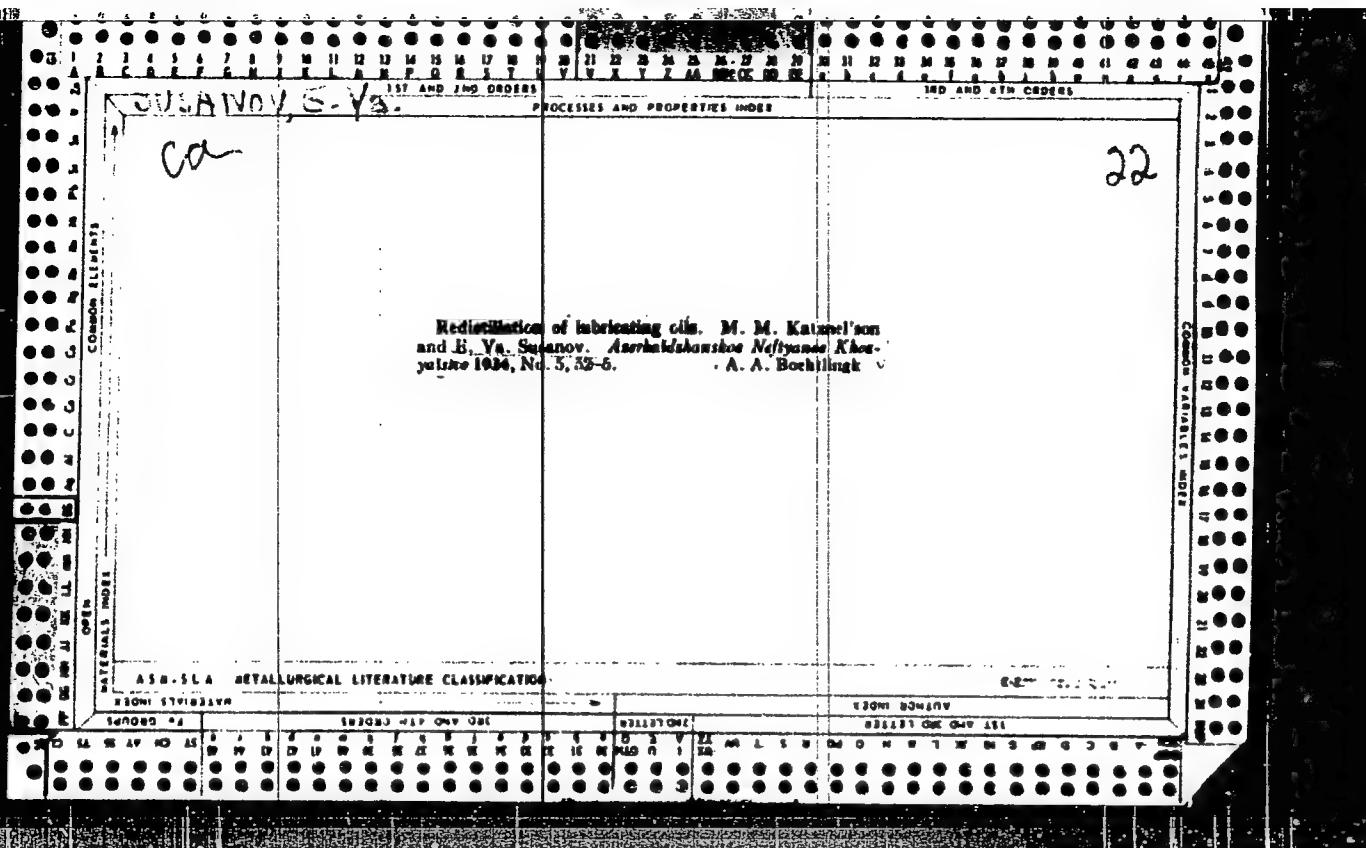


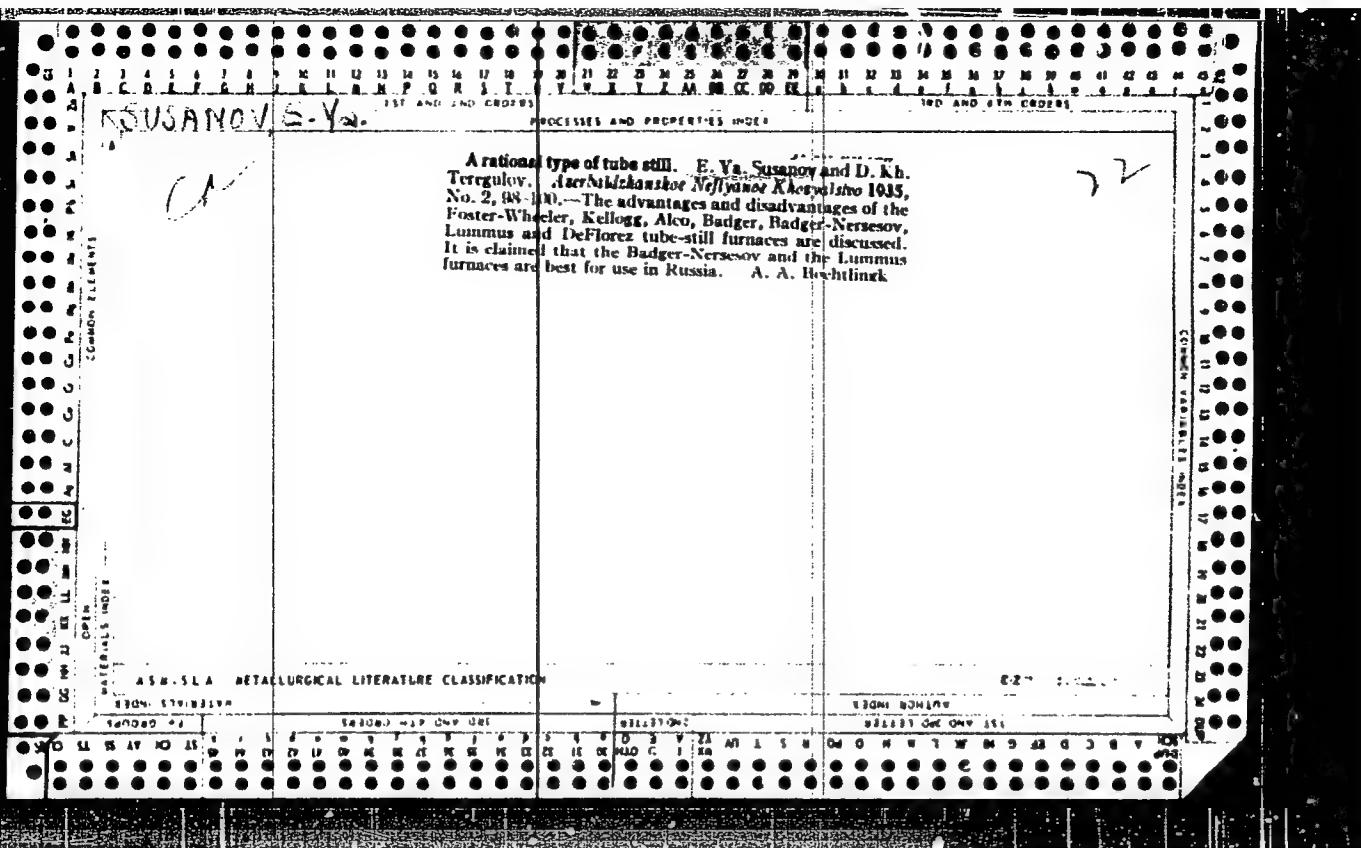


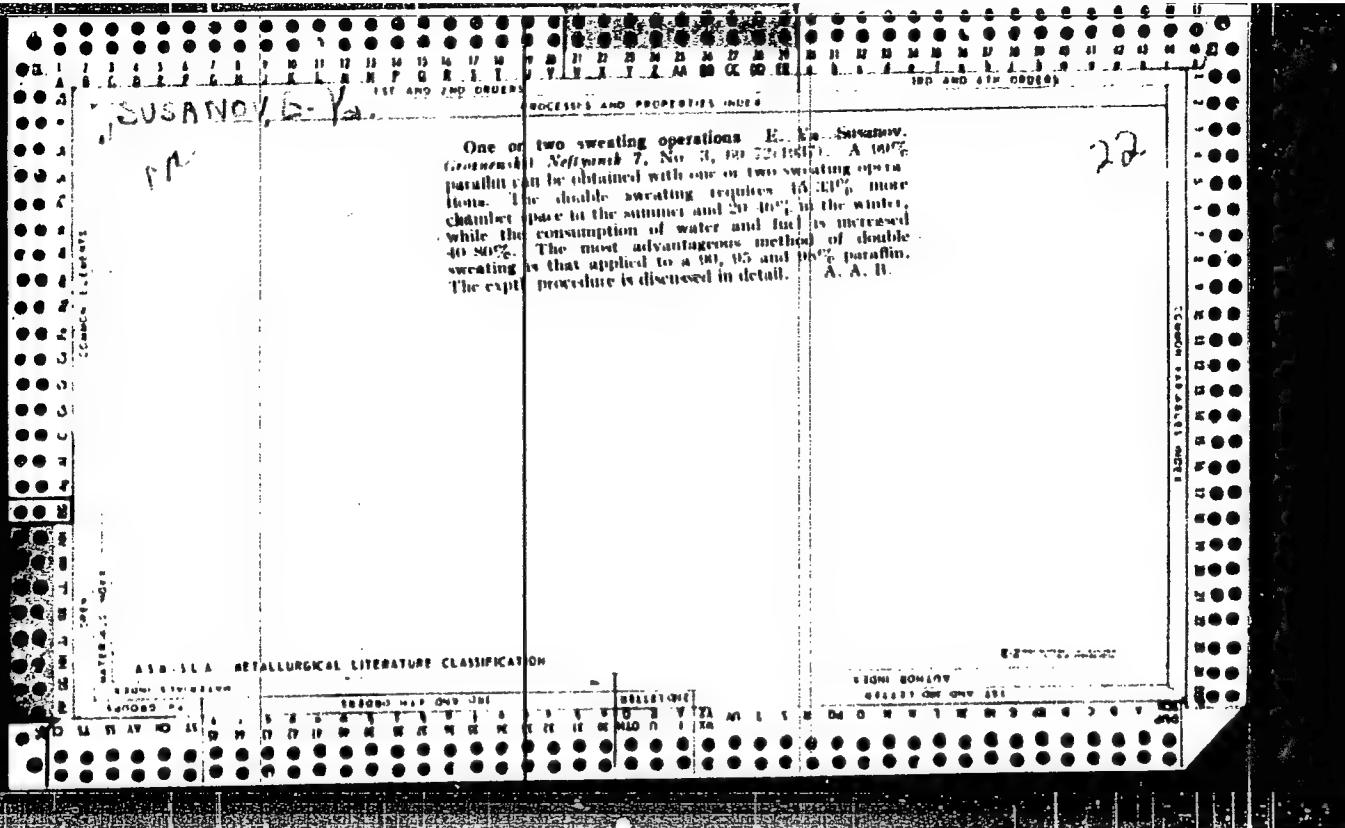


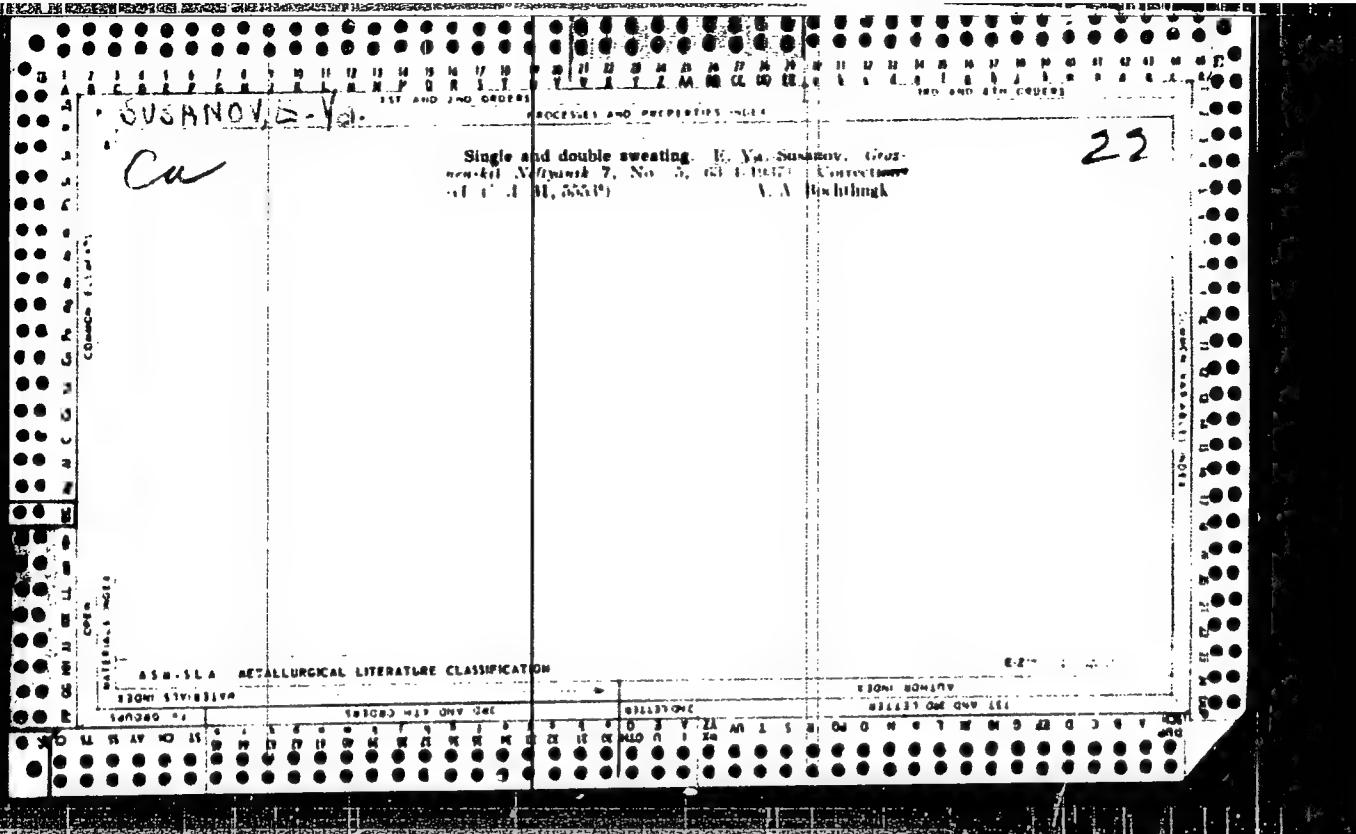


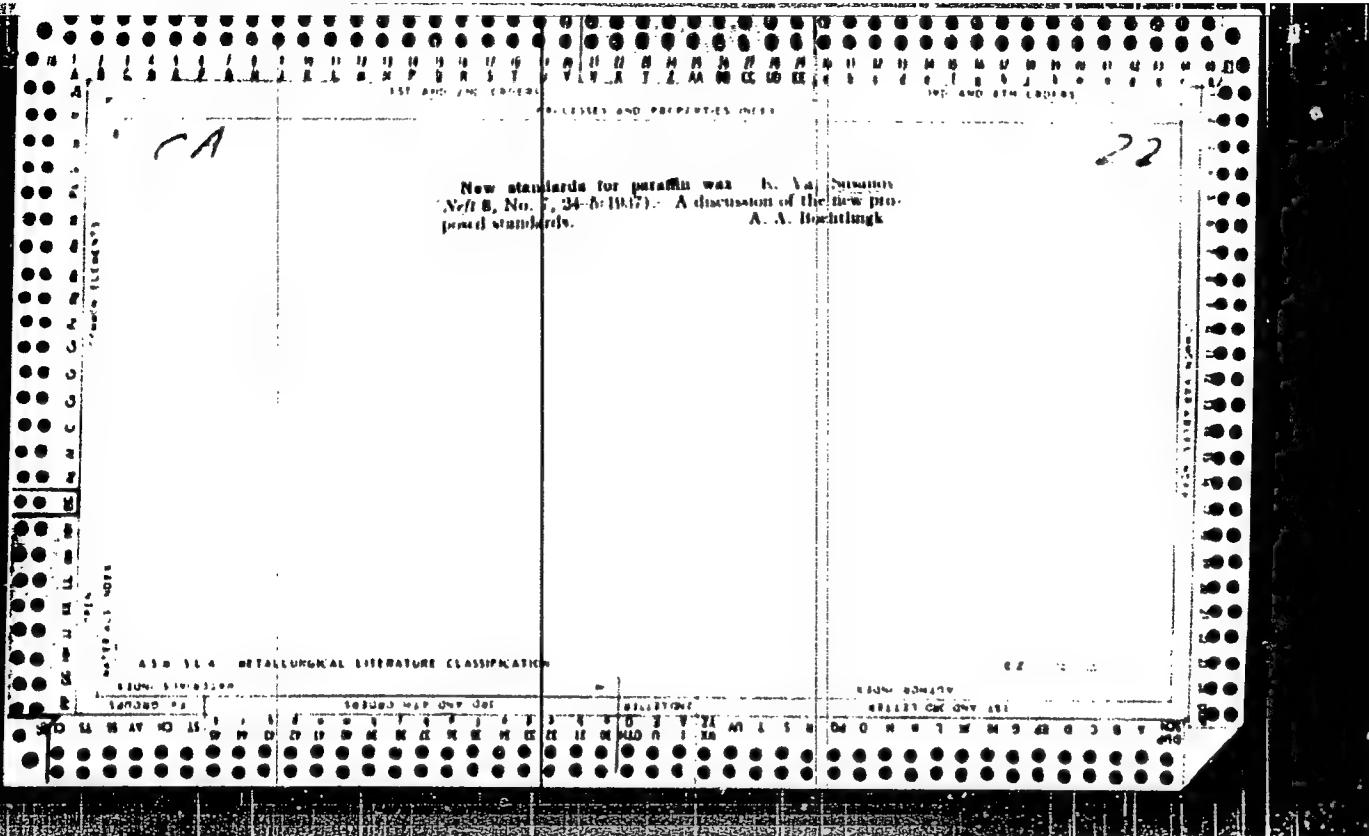


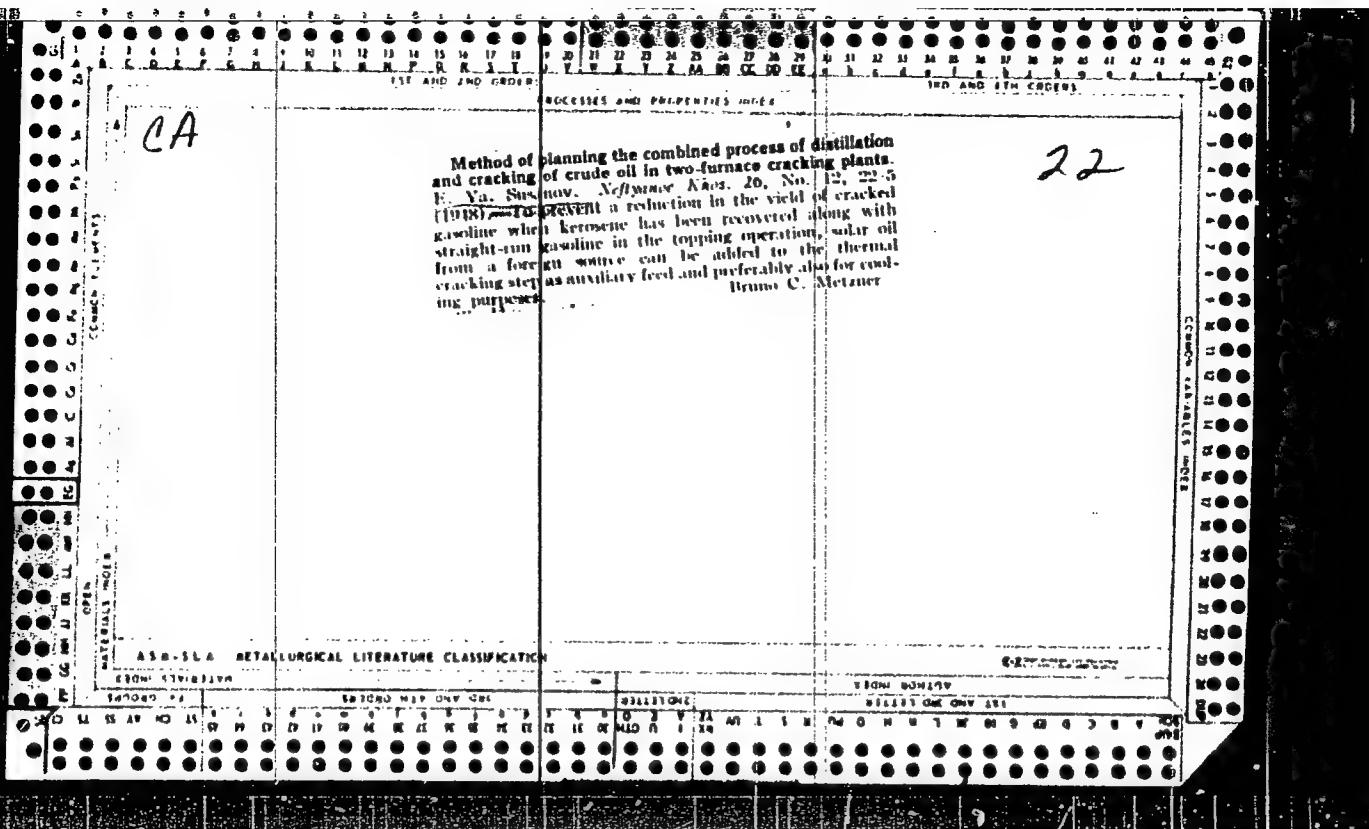












SUSANOV, Ye. Ya.

AID P - 830

Subject : USSR/Chemistry

Card 1/1 Pub. 78 - 15/26

Author : Susanov, Ye. Ya.

Title : Kinetics of rectification

Periodical : Neft. khoz., v. 32, #9, 62-69, S 1954

Abstract : The author attempts to present a theoretical solution of the kinetic problem of the rectification of oil and to work out a basis for computation without empirical correction for efficiency of the process. The theoretical part discusses the true physical concept of the postulate of the "theoretical" stage of the rectification and the efficiency of the real stage. The theory introduced was experimentally confirmed by L. S. Aksel'rod, B. B. Dil'man, I. N. Kuz'minykh and others (Khim. Prom., #1, 2, 1954). Two drawings.

Institution: None

Submitted : No date

SUSANOV, Ye.Ya. (Krasnodar)

Conditions for the thermodynamic invariance of the rectification process. Zhur. fiz. khim. 35 no.5:999-1002 My '61.
(MIRA 16:7)

(Distillation, Fractional)
(Phase rule and equilibrium)

S/081/62/000/018/034/059
B158/B180

AUTHORS: Susanov, Ye. Ya., Novozhilova, T. S., Garanin, I. L.,
Podol'skiy, M. A.

TITLE: Catalytic reforming of narrow fractions of straight-run
gasolines and gas condensates from the Krasnodar region

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 18, 1962, 445, abstract
18N133 (Tr. Krashodarsk. fil. Vses. neftegaz. n.-i. in-ta,
no. 8, 1962, 88-95)

TEXT: Straight-run gasolines and gas condensates from the Krasnodar
region, which contain a large quantity of cyclanes, are a valuable raw
material for the production of aromatic hydrocarbons. Catalytic reforming
of the narrow fractions ($60-105^{\circ}\text{C}$ and $105-140^{\circ}\text{C}$) separated from these
forms of crude was carried out with alumino-platinum catalyst AP-56
(AP-56) in a pilot plant. The flow sheet and description are given. The
resulting data show that maximum aromatic hydrocarbon yield is obtained
under the following optimum conditions: for the $60-105^{\circ}\text{C}$ fraction,

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Catalytic reforming of narrow ...

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B156/B160

temperature 515°C , volumetric rate 1, pressure 20 atm.; for the $105\text{-}140^{\circ}\text{C}$ fraction, temperature 510°C , volumetric rate 1.5, pressure 38 atm. Under rigorous conditions there is considerable formation of aromatic hydrocarbons at the expense of the alkanes. The aromatic yield can be increased 1.2-1.4 times by tightening up process conditions.

[Abstracter's note: Complete translation.]

Card 2/2

SUSANOV, Ye. Ya.

Simplified analytical method for calculating the number of theoretical plates. Izv. vys. ucheb. zav., khim. i khim. tekhn. 5 no. 5:854-855 '62. (MIRA 16:1)

1. Krasnodarskiy filial Vsesoyuznogo nauchno-issledovatel'skogo neftegazovogo instituta.

(Plate towers)

SUSANOV, Ye.Ya.

Analytical method for calculating the number of theoretical plates in rectification process. Zhur.prikl.khim. 35 no.2:366-370 F '62.
(MIRA 15:2)

(Plate towers)

SUSANOV, Ye.Ya.

Fractional composition and reflux-to-product ratio in the
rectification of multi component mixtures. Zhur.prikl.khim. 35
no.2:371-377 F '62. (MIRA 15:2)
(Distillation, Fractional)

SUSANOV, Ye. Ia.

Thermodynamics of the separation of binary and
multicomponent systems. Trudy KF VNII no.8:5-43 1959.

Fundamentals of the hydrodynamic theory of mass transfer.
Ibid. 8:44-59 (MIRA 17:5)

SUSANOV, Ye.Ya.; ALEKSEYEV, Yu.A.

Principles of the automatic control of the separation of homogeneous liquid and gas mixtures. Trudy KF VNII no.8; 60-79 '62.

Results of the combined automatic control of the AGFU-1 unit of the Novo-Ufimskiy Petroleum Refinery. Ibid., 80-87 (MIRA 17:5)

SUSANOV, Yu.A., inzh.

Recent developments in the calculation of compensators. Vod. i san.
tekhn. no.9:28 S '64. (MIRA 17:11)

SUSAN SZKIY, Mihaly; POLTZER, Gyorgy

A simple, cheap, and amateur TV picture transmission equipment
suitable for industrial purposes. Radiotekhnika 12 no.9:292-294
S '62.

SUSANSZKY, J.

TECHNOLOGY

PERIODICAL: GEP. Vol. 10, no. 4, Apr. 1958

Susanszky, J. Calculation of economical contraction into series applicable for repeated individual production. p. 128.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 2,
February 1959, Unclass.

Munka szemle, 1963.

Role of situation analysis in reorganizing enterprises.
Munka szemle 7 no.9:15-17 S'63.

SUSANSZKY, Janos, dr., tanszerekvezeto egyetemi docens; GYARMATI, Ferenc

Sampling process by means of the narrow-film camera equipped
with a control device. Gep 15 no.12:475-477 D '63.

1. Nehezipari Muszaki Egyetem Ipargazdasagtani Tanszek, Mis-
kolc (for Susanszky). 2. Gazkeszulekgyarto Vallalat, Budapest
(for Gyarmati).

KODOLANYI, Gyula; ZOLTAN, Oszkar; SZABO, Miklos; SUSANSZKY, Laszlo

Parallel operation of short-wave, medium and long-wave radio broadcasting transmitters; also, remarks by O.Zoltan, M.Szabc, and L.Susanszky. Muszaki kozl MTA 26 no.1/4:89-97 '60. (EEAI 9:10)

1. Magyar Adocsogyar (for Kodolanyi)
(Radio)

EREKY, Vilmos; SUSANSZKY, Laszlo; PECS, Laszlo; SZABO, Laszlo.

Connections between the characteristics of power-amplifier electric circuits and parameters of power-amplifier triodes; also, remarks by L.Susanszky, L.Pecs, and L.Szabo. Muszaki kozl MTA 26 no.1/4:199-217 '60. (EEAI 9:10)

1. Hiradastechnikai Kutato Intezet (for Erey)
(Electric circuits) (Triodes) (Amplifiers)

SUSANSZKY, Miklos; POLTZER, Gyorgy

A simple, cheap TV picture transmission installation suitable
for amateur and industrial purposes. Pt. 2. Radiotekhnika 12
no.10:334-335 0 '62.

RUDAKOVA, S.F.; ZHUKOVA, N.A.; KHNYCHEV, S.S.; SUSANYAN, T.A.; KQZLOVA, I.I.

Some new aspects of the effect of ϵ -aminocaproic acid
on the organism. Vest. AMN SSSR 20 no.9:74-77 '65.
(MIRA 18:11)

1. Institut meditsinskoy radiologii AMN SSSR, Obninsk.

L 16778-66 EWT(m) ACC MR: AP6001322	SOURCE CODE: UR/0248/65/000/009/0070/0074
AUTHOR: <u>Baluda, V. P.</u> ; <u>Lysogorov, N. V.</u> ; <u>Khnychev, S. S.</u> ; <u>Ishmukhametova, D. N.</u> ; <u>Rukazenkova, Zh. N.</u> ; <u>Gorlanova, T. A.</u> ; <u>Rudakov, I. A.</u> ; <u>Susanyan, T. A.</u>	
ORG: <u>Institute of Medical Radiology AMN SSSR, Obninsk (Institut meditsinskoy radiologii AMN SSSR)</u>	
TITLE: <u>Blood coagulation and fibrinolytic activity in acute radiation sickness</u> [95]	
SOURCE: <u>AMN SSSR. Vestnik, no. 9, 1965, 70-74</u>	
TOPIC TAGS: <u>radiation sickness, blood, coagulation, hematology</u>	
ABSTRACT: The hemorrhagic syndrome is considered the gravest manifestation of acute radiation sickness and to a great extent determines its degree, duration and outcome. However, despite numerous investigations of the factors responsible for hemorrhage in this disease, the pathogenesis of this phenomenon has not been elucidated. The authors have investigated the functional conditions of coagulation and of the fibrinolytic system of the blood in acute radiation sickness produced by gamma-radiation with Co ⁶⁰ . 256 "August" strain rats were irradiated with	
UDC: 617-001.28-036.11-07:[616.151.5+616.153. 962.4]	
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ACC NR: AP6001322

600 rad each. Four phases were discernible during the course of the disease: Phase I--primary reaction (1-2 days following irradiation), II--hidden (3-6 days), III--peak (7-15 days), IV--recovery (20-30 days). Detailed descriptions are presented of the physical appearance and behavior of the animals during the four phases as well as of the changes found in the cellular composition of the blood, bone marrow and spleen. The following changes in the clotting system of the blood were observed following irradiation: initial decrease (phase I) followed by an increase in the coagulation time, reduced tolerance of plasma to heparin, diminished prothrombin activity, increased thrombin time and fibrinogen concentration, first an increase (phase II) then a decrease (Phase III) in thrombin concentration, reduced thermal stability, the emergence of fibrinogen B, reduced fibrinase and increased fibrinolytic activity, diminished platelet count and delayed retraction of the clot. The electron microscope showed disturbances in the fibrin fibers such as rupture and vacuolization. It is evident that the hemorrhagic syndrome appears in the first phase only 24 hours after irradiation as indicated by the presence of blood in the feces at that time. It can therefore be concluded that in acute radiation sickness damage to the blood vessel walls first occurs in the gastrointestinal tract and only later spreads to the vessels of the skin. Also responsible for the hemorrhage

Card 2/3

L 16778-66

ACC NR: AP6001322

'gic syndrome is the disordered coagulation of the blood which in itself can cause alterations in the vascular walls and produce bleeding in addition to its more obvious effects. Orig. art. has: 1 table.

SUB CODE: 06/ SUBM DATE: 05Jun65/ ORIG REF: 008/ OTH REF: 017

Card 3/3 MC

SUSAREV, M.; KUDRYAVTSEVA, L.

Determining the region in which the composition of a three-component azeotrope is located in a concentration triangle. Izv. AN Est. SSR. Ser. fiz.-mat. i tekhn. nauk 12 no.2:212-217 '63. (MIRA 16:10)

1. Academy of Sciences of the Estonian S.S.R., Institute of Chemistry.

1. SOKRONKIN, A. V., <u>SUSAREV, M. P.</u>		
2. USSR (600)		
4. Phase Rule and Equilibrium		
7. Study of general and partial vapor tensions of the system "hydrogen chloride - sulfuric acid - water." Vest. Len. un. 7 No. 6, 1952		
9. <u>Monthly List of Russian Accessions</u> , Library of Congress, May 1953, Uncl.		

STORONKIN, A.V.; SUSAREV, M.P.

Thermodynamic relation between the compositions of azeotropic mixtures of multicomponent systems. Vest. LGU 8 no.5:91-112 My '53. (MIRA 12:7)

(Systems (Chemistry)--Thermal properties)

SSRA

Equilibrium conditions of multicomponent systems. VI.
A. V. Storozkin and M. P. Sutarev (A. A. Zhdanov State
Univ., Leningrad). *Zh. fiz. chern.*, 16(5)-62 (1933); cf.
C.A. 36, 3231; 45, 2461. — A differential equation is derived
for the relation of the compn. of a vapor to temp. and pres-
sure for the case when the compn. of the soln. is changed ac-
cording to the conditions for thermodynamic simplification.
Approx. formulas are developed for the relation among the
properties for binary and ternary azeotropic mixts. under
isothermal and isobaric conditions. A rule is presented for
the calcn. of the compn. of thermodynamically possible bi-
nary and multicomponent azeotropic mixts. from the prop-
erties of binary mixts. contg. common components with
those for which the calsns. are being made. J.R.L.

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001654010002-2

Summary M.R.

2

11 LTH

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001654010002-2"

AUTHOR:

Susarev, M. P.

SOV/76-32-8-16/37

TITLE:

On the Relation Between the Shape of the Vapor Isothermal-
Isobaric Curves and the Distribution of the Components Be-
tween the Coexisting Phases in Ternary Solution-Ideal Vapor
Systems (O svyazi mezhdu formoy izoterm-izobar para i.
raspredeleniyem komponentov mezhdu sosushchestvuyushchimi
fazami v trekhkomponentnykh sistemakh rastvor-ideal'nyy par)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1958, Vol. 32, Nr 8,
pp. 1827-1830 (USSR)

ABSTRACT:

Sufficiently accurate data on the composition of coexisting
liquids and vapors make possible a representation and classi-
fication of the thermodynamic properties of the system not
only by changes of the solution but also of the vapor. This
may be carried out using the differential equation of A.V.
Stornikin (Ref 1). After modifying the Van der Waals (Van der
Vaals) equation and after mathematical derivations a formula
is obtained which after corresponding considerations leads to
the conclusion that the compositions of the coexisting phases
are located on a secant of the triangle of concentration. The

Car 1/2

On the Relation Between the Shape of the Vapor Isothermal-Isobaric Curves and the Distribution of the Coexisting Phases in Ternary Solution-Ideal Vapor Systems.	SOV/76-32-8-16/37 of the Components Between Vapor Systems.	
	secant proceeds from that point of the triangle which corresponds to the component with the extreme value of the molecular share. Explanations are given for a triangle diagram of a system with closed isothermal-isobaric curves, with the inner isothermal-isobaric curve corresponding to the vapor surface, and the outer to the surface of the liquid. Finally the author mentions that the problem mentioned was in close relation to the considerations by A.V. Storonkin and M.M. Shul'ts (Ref 3). There are 1 figure and 3 references, [] which are Soviet.	
ASSOCIATION:	Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanova (Leningrad State University imeni A.A. Zhdanov)	
SUBMITTED:	March 19, 1957	
Card 2/2		

5(3)

AUTHORS:

Susarev, M. P., Gvozdovskiy, G. N.

SOV/54-59-1-8/25

TITLE:

Investigation of the Vapor Pressure of Saturated Solutions
of Hydrochloric Aniline in Hydrochloric Acid at 25°C (Issle-
dovaniye davleniya para nasyshchennykh rastvorov solyanokislogo
anilina v solyanoy kisloty pri 25°C)

PERIODICAL:

Vestnik Leningradskogo universiteta. Seriya fiziki i khimii,
1959, Nr 1, pp 67-72 (USSR)

ABSTRACT:

In this paper the authors investigated the solubility and partial pressure of saturated solutions within the system hydrochloric aniline - water-hydrochloric acid. The methods of determination applied were similar to those already described in reference 4. For the solubility of hydrochloric aniline in water the value 52.05 wt% was found (in good agreement with data available in publications), the value 19.74 torr for the steam pressure of water over the saturated solution (value of reference 1: 19.79 torr). All experimental data on the partial pressure and composition of vapor for solutions of $C_6H_5N\cdot HCl$ saturated at 25° in the binary solvent $H_2O\cdot HCl$ with various percentages of the molar composition of the latter are listed in a table. On the isothermal line of solubility (Fig 1) a maximum of one of both components of the binary

Card 1/2

Investigation of the Vapor Pressure of Saturated Solutions of Hydrochloric Aniline in Hydrochloric Acid at 25°C

SOV/54-59-1-8/25

system, i.e., of water was distinctly marked. Further, the authors observed a continuous drop of the partial steam pressure with simultaneous increase of the partial vapor pressure of HCl dependent on the composition of the binary solvent (Fig 2). This agrees with the thermodynamic law since the partial vapor pressures of the components of a binary solvent change always in a monotonous manner and in opposite direction. On the basis of these investigations the authors further dealt with the problem of the mutual positions of the composition of a ternary saturated and binary solution which correspond to turning points of pressure. It was stated herein that the ratio HCl/H₂O equal to 0.57 of the concentration of the components of the binary solvent corresponds to the pressure minimum in the ternary saturated solution. This value is smaller than that corresponding to a binary azeotropic solution (0.61). There are 3 figures, 1 table, and 9 references, 7 of which are Soviet.

SUBMITTED: June 10, 1958

Card 2/2

10(5)5(2,3)

SCV/80-32-3-42/43

AUTHORS: Storozhkin, A.V., Morachevskiy, A.G., Susarev, M.I., Volkind, I.Ya., Filatov, I.G.

TITLE: Bibliography (Bibliografiya)

PUBLICATIONAL: Zhurnal prikladnoy khimii, 1959, Vol XXXII, Nr 3, pp 694-699
(USSR)

ABSTRACT: The article contains the review of 3 books, one of which is a translation from English. The two Soviet books are: "Reference Book for the Equilibrium Between Liquid and Vapor" and "Plastics and Their Inflammability".

3: rd 1/1

SUSAREV, M.P.; LYZLOVA, R.V.

Liquid - vapor equilibrium in the system cyclohexane - cyclohexanol - cyclohexanone. Zhur. prikl. khim. 33 no. 12:2786-2788 D 1960.

(MIRA 14:1)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001654010002-2"

SUSAREV, M.P.

Liquid - vapor equilibrium in the system water - dimethylformamide.
Zhur. prikl. khim. 34 no.2:412-415 F '61. (MIRA 14:2)

1. Leningradskiy gosudarstvennyy universitet imeni Zhdanova.
(Formamide)

SUSAREV, M.P.; GORBUNOV, A.N.

Isotherm-isobar equation of vapor and the evaluation of the reliability
of data on liquid-vapor equilibrium in three-component systems. Zhur.
prikl.khim. 35 no.1:111-115 Ja '62. (MIRA 15:1)
(Systems (Chemistry)) (Phase rule and equilibrium)

SUSAREV, M.P.; LYZLOVA, R.V.

Liquid - vapor equilibrium in the system benzene - cyclohexane -
methylcyclopentane. Zhur. fiz. khim. 36 no.3:437-442 Mr '62.
(MIRA 17:8)

1. Leningradskiy universitet imeni Zhdanova.

SUSAREV, M.; KUDRYAVTSEVA, L.

Definition of the concentration region of the temperature shift in a ternary azeotrope system. Izv. AN Est. SSR; Ser. fiz.-mat. i tekhn. nauk 12 no.3:312-319 '63. (MIRA 16:11)

1. Institute of Chemistry of the Academy of Sciences of the Estonian S.S.R. and Leningrad State University.

SUSAREV, M.P.; GORBUNOV, A.N.

Liquid - vapor equilibrium in the system benzyl alcohol - toluene - water.
Zhur.prikl.khim. 36 no.2:459-461 F '63. (MIRA 16:3)
(Benzyl alcohol) (Toluene) (Phase rule and equilibrium)

KUDRYAVTSEVA, L.S.; SUSAREV, M.P.

Liquid - vapor equilibrium in the systems chloroform - hexane and
acetone - chloroform. Zhur.prikl.khim. 36 no.6:1231-1237 Je '63.
(MIRA 16:8)

(Chloroform) (Hexane) (Acetone)

KUDRYAVTSEVA, L.S.; SUSAREV, M.P.

Liquid - vapor equilibrium in the system acetone- chloroform -
Hexane at temperatures 35, 45, 55° and pressure 760 mm. Hg.
Zhur. prikl. khim. 36 no.8:1710-1716 Ag '63.

Differential equation of the curves of multiple distributions
(constancy of the relative volatility) of two components of
a ternary system solution - ideal vapor. 1717-1721
(MIRA 16:11)

1. Leningradskiy gosudarstvennyy universitet.

GORBUNOV, A.N.; SUSAREV, M.P.

Liquid - vapor equilibrium in the system benzoic acid -
methanol - water. Zhur. prikl. khim. 36 no.9:2021-2024
D '63. (MIRA 17:1)

KUDRYAVTSEVA, L.S.; SUSAREV, M.P.

Liquid - vapor equilibrium in the system ethyl alcohol - chloroform - hexane at temperatures of 55, 45, 35° and pressures of 760 mm Hg. Zhur. prikl. khim. 36 no.9:2025-2030 D '63.
(MIRA 17:1)

KUDRYAVTSEVA, L.S.; SUSAREV, M.P.

Differential equation of multiple distribution curves
(constance of relative volatility) of the two components
of a ternary system solution - ideal vapor. Zhur. prikl.
khim. 36 no.10:2239-2243 0 '63. (MIRA 17:1)

L 18318-63	FCS(f)/EPF(c)/EWI(m)/BDS	Pr-4	RM/WW	S/0076/63/037/008/1739/1744	61
ACCESSION NR:	AP3004971				60
AUTHORS:	Susarev, M. P. Chen' Shu-Tzu.				
TITLE:	Evaluation of vapor-liquid equilibrium in a ternary system by data for binary systems. The system benzene-n-hexane-cyclohexane.				
SOURCE:	Zhurnal fiz. khimii, v. 37, no. 8, 1963, 1739-1744.				
TOPIC TAGS:	vapor-liquid equilibrium, benzene, hexane, cyclohexane.				
ABSTRACT:	Authors examined the practicability of evaluating a ternary system in terms of a binary one by comparing the experimental data with data calculated according to the proposed method and that of Gala (Zhurn. fiz. khimii, v. 33, 1959, pp 24, 35) as well as that of Benjamin et al (Ind. Eng. Chem. 51, 1959, 219). The system benzene-n-hexane-cyclohexane was studied. The experimental and calculated data are summarized in a table which show good agreement with each other. At a constant temperature, the partial pressure of isomeric compounds, which form a close-to-ideal solution, changes in direct proportion to the concentration,				
Card	1/2				

L-18318-63

ACCESSION NR: AP3004971

while the partial pressure of the third component remains constant if its molal concentration remains constant. Orig. art. has:
2 figures and 4 tables.

ASSOCIATION: Leningradskiy gosudarstvenny*y universitet
(Leningrad State University).

SUBMITTED: 28Nov60

DATE ACQ: 06Sep63

ENCL: 00

SUB CODE: PH, CH

NO REF SOV: 003

OTHER: 002

Card 2/2

L 18314-63

EWT(m)/BDS RH

ACCESSION NR: AP3004973

S/0076/63/037/008/1763/1768

51

50

AUTHOR: Susarev, M. P.

TITLE: Regularities in fold distribution of the pressure surfaces of ternary
vapor-liquid systems and the shifting of folds with temperature change. I

SOURCE: Zhurnal fiz. khimii, v. 37, no. 8, 1963, 1763-1768

TOPIC TAGS: vapor-liquid system

ABSTRACT: A study of ternary systems in distillation and redistillation processes was directly connected with surface structure of the total vapor pressure (boiling points). Basic factors influencing the shape of the folds of the concentration triangle are: the character of separating action of the third component in relation to the components forming the binary system, in which the fold first is kept; the type of fold (crest or hollow). Corresponding to the factors which determine the direction of shifting of the fold at any point with a temperature change are: ratio of partial molar heat of evaporation on components forming the binary system in which the fold is kept; type of fold. The equation is derived for the equidistribution curve between coexisting phases of 2 components of a ternary solution- the ideal vapor (curve of stability and equality to unit of

Card 1/2

L 18314-63

ACCESSION NR: AP3004973

relative volatility Alpha_{1k} of 2 components). Orig. art. has: 29 equations and
1 figure.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad state university).

SUBMITTED: 23Jan61

DATE ACQ: 06Sep63

ENCL: 00

SUB CODE: PH

NO REF Sov: 003

OTHER: 001

Card 2/2

SUSAREV, M.P.

Regularities in the location of surface pressure folds of a ternary liquid-vapor system and in the shift of folds with change in temperature. Part 2. Zhur. fiz. khim. 37 no.9: 1944-1948 S '63. (MIRA 16:12)

1. Leningradskiy gosudarstvennyy universitet.

SUSAREV, M.P.

Relation between node arrangement of a ternary system and the separating effect of components. Zhur.fiz.khim. 37 no.10:2163-2167 0'63.
(MIRA 17:2)

1. Leningradskiy gosudarstvennyy universitet.

SUSAREV, M.P.; PROKOF'YEVA, R.V.

Liquid-vapor equilibrium in the system water - hydrogen chloride -
ferric chloride at 25°C. Zhur. fiz. khim. 37 no.11:2408-2412
N'63. (MIRA 17:2)

1. Leningradskiy gosudarstvennyy universitet.

SUSAREV, M.P.; KUDRYAVTSEVA, I.S.; MATUSHKEVICH, E.A.

Concentration regions of the location and temperature shift of
ternary azeotropes. Zhur. fiz. khim. 37 no.12:2672-2677 D '63.

1. Leningradskiy gosudarstvennyy universitet imeni Zhdanova.

SUSAREV, M.P.; GORBUNOV, A.N.

Differential equations for families of solubility isotherms of
the solid phases of the ternary system at equilibrium with an
ideal melt. Zhur. prikl. khim. 37 no.2:304-310 F '64.
(MIRA 17:9)

SUSAREV, M.P.; GUSEVA, V.V.

Phase equilibria in the system water - hydrogen chloride-dioxane at 50 C. Zhur.prikl.khim. 37 no. 5:1067-1072 My '64.
(MIRA 17:7)

KRIVONOVA, I.V.; VASIL'KOVA, A.; SUSAREV, H.P.

Concentration relations of ternary eutectics in the system
NaCl - KCl - K₃VCl₆. Zhur. prikl. khim. 37 no.10:2198-2203
0 182. (MIRA 17:11)

KRTVOUSOVA, I.V.; VASIL'KOVA, I.V.; SUSAREV, M.P.

Thermographic study of the system $\text{CaCl}_2 - \text{NaCl} - \text{KCl}$ Zhur. prikl. khim. 37 no.11:2348-2353 N '64 (MIRA 18:1)

SUSAREV, M.P.; KUDRYAVTSEVA, L.S.

Concentration regions of location and temperature shift of ternary
azeotropes. Part 2. Zhur. fiz. khim. 38 no.1:47-51 Ja'64.
(MIRA 17:2)

1. Leningradskiy gosudarstvennyy universitet imeni A.A. Zhdanova.

KUDRYAVTSEVA, L.S.; SUSAREV, I.P.

Concentration regions of the location and temperature
displacement of ternary azeotropes. Part 3. Zhur. fiz. khim.
38 no.2:345-350 F '64. (MIF A 17:8)

1. Leningradskiy gosudarstvennyy universitet imeni Zhdanova.

SUSAREV, M.P.; GORBUNOV, A.N. (Leningrad)

Calculation of liquid - vapor isothermal equilibrium in
ternary systems of which two components form a system with
small deviations from the laws of ideal solutions. Zhur. fiz.
Khim. 38 no.3:583-588 Mr '64. (MIRA 17:7)

1. Leningradskiy gosudarstvennyy universitet imeni A.A. Zhdanova.

MARTYNOVA, N.S.; VASIL'KOVA, I.V.; SUSAREV, M.P.

Thermographic study of ternary and binary systems formed by UO₂, UCl₄, and
KCl. Atom. energ. 18 no.6:616-623 Je '65. (MIRA 18:7)

VASIL'KOVA, I.V.; KRIVOUSOVA, I.V.; SUSAREV, M.P.; TOLKACHEV, S.S. [deceased]

X-ray study of the mutual solubility of solid phases in the
ternary systems $KCl - NaCl - CrCl_3$ and $KCl - NaCl - VCl_3$.
Vest. LGU 20 no.16:126-132 '65.
(MIRA 18:9)

MARINICHEV, A.N.; SUSAROV, M.P.

Study of phase equilibria in the system acetone-methanol-cyclohexane. Zhur. prikl. khim. 36 no.5:1054-1057 My '65.
(MIRA 16:11)

MARINICHENKOV, A.N.; SUSAREV, M.P.

Liquid - vapor equilibrium in the system methanol - cyclohexane at 34,
45, 55° and pressure of 760 mm of Hg. Zhur. prikl. khim. 38 no.7:1619-
1621 J1 '65. (MIRA 18:7)

SUGARF, I. A., VENICHIEV, A.N.

Differential equations for the distribution constancy curves
($x^{(1)}/x^{(2)} = \text{const}$) of a component in the ternary system between
coexisting solution and ideal vapor. Part 1. Zhur. fiz. khim.
39 no. 8:1970-1977 Ag '65. (MIRA 18:9)

1. Leningradskiy gosudarstvennyy universitet imeni Zhdanova.

ZUBAROV, M. P.; VERTACHEV, A. I.

Differential equations for curves of the constancy of distribution
 $(x_e^{(1)}/x_e^{(2)}) = \text{const.}$) of the component of a ternary system between the
concentrated solution and ideal vapor. Part 2. Zhur. fiz. khim. 39
no. 9:2219-2225 S '65. (MIRA 18:10)

I. Leningradskiy gosudarstvennyy universitet imeni A.A.
Shchepetova.

MARTYNOVA, N.S.; VASIL'KOVA, I.V.; SUSAREV, M.P.

Evaluation of the concentration region of the location of
ternary eutectics in common eutectic systems according to
the data on binary eutectics and components, Vest, LGU 20
no. 22:96-100 '65.
(MIRA 18:12)

KUDRYASHOVA, Z.P.; VASIL'KOVA, I.V.; SUSAREV, M.P.

Application of differential equations of solid phase solubility
isotherms in an ideal melt for evaluating the reliability of
experimental data; system $\text{NH}_4\text{NO}_3 - \text{KNO}_3 - \text{Pb}(\text{NO}_3)_2$. Zhur.
prikl. khim. 38 no.10:2252-2257 0 '65. (MIRA 18:12)

1. Submitted July 8, 1963.

SUSAREV, M.P.; ZAPOL'SKAYA, M.A.; VINICHENKO, I.G.

Calculation and study of liquid - vapor equilibrium in the system acetone - chloroform - ethyl alcohol. Zhur. fiz. khim. 39 no.10:2396-2400 O '65.

(MIRA 18:12)

1. Leningradskiy gosudarstvennyy universitet imeni Zhdanova.
Submitted June 10, 1964.

63950-65 ACCESSION NR: AP5022491	REF ID: ES/RD/JW/DV/RM UR/0089/65/018/006/0616/0623
AUTHOR: Martynova N. S.; Vasil'kova, I. V.; Susarev, M. P.	
TITLE: Thermographic studies of ternary and binary systems: UO_2 - UCl_4 and KCl	
SOURCE: Voprosy energiya, v. 12, no. 5, 1965, 616-627	
TOPIC TAGS: thermal analysis, uranium compound, chloride, potassium chloride	
COMMENT: Thermographic studies were made of $\text{UCl}_4\text{-KCl}$, $\text{UO}_2\text{-KCl}$, $\text{UO}_2\text{-UCl}_4$, and $\text{UO}_2\text{-UCl}_4\text{-KCl}$ into	
Card 1/2	

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001654010002-2

ACCESSION NR: AF5022191

SUBMITTED: OSMAR G.

ENCL: 00

SUB CODE: IC, TD

SEARCHED: Y

INDEXED: Y

M

Card 2/2

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001654010002-2"

SUSKOV, A.N., red.; SMIRNOV, P.S., tekhn. red.

[Streetcars, trolley bus and motorbus lines, passenger cab and truck service; handbook of passenger traffic of the Leningrad City Transit] Tramvai, trolleybus, avtobus, legkovye i gruzovye taksomotory; spravochnik passazhirskogo dvizheniya Leningrad-skogo gorodskogo transporta. Leningrad, "Lengorspravka," 1950. 240 p.

(MIRA 16:1)

(Leningrad—Transit systems)

1. SUSAROV A.S.

2. USSR (600)

4. Sowing

7. Ways to sow perrennial grasses and companion crops, Sov. agron. 11 no.?, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, unclass.

	USSR/Pharmacology and Toxicology. Toxicology.	V
Abs Jour:	Ref Zhur-Biol., No 19, 1958, 90011.	
Author :	Susarova, A.M.; Tchayakov, P.T.	
Inst :	Chkalovskaya Oblast-Division of the All-Union Chemical Society imeni D.I. Mendeleev.	
Title :	Effect of Sulfurous Gas on the Biological Activity of Insulin in the Animal Organism.	
Orig Pub:	Vestn. Chkalovskogo obl. otd. Vses. Khim. o-va im. D.I.	
Abstract:	Under normal conditions, the administration of insulin (I) (in doses of 1 unit/kg) to rabbits causes a fall of blood sugar by 47.4% within 2 hours. When the ani- mals were exposed, after the injection of I, to the action of sulfurous gas in a gas chamber at a concen-	
Card :	1/2	V-47